

WINTERLING et al., Ser. No. 10/511,162

PF 53429

REMARKS

Claims 1-9 are pending.

The Examiner has indicated that the IDS filed with the application has been considered, but the reference WO 01/09244 (equivalent to US 6,699,960) has not been listed on the Notice of References Cited. Applicants request consideration of this reference and indication thereof on form PTO-1449 or PTO-892.

Claims 1-9 stand rejected under 35 U.S.C. 102(b) as being anticipated by US 6,316,588 (Mohrschladt'588) or US 6,288,207 (Mohrschladt'207). Applicants respectfully traverse this rejection. A claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference and the elements must be arranged as required by the claim (MPEP 2131).

The present claims are directed to a process for preparing a polyamide in the presence of a titanium dioxide catalyst whose BET surface area is from 5 to 35 m²/g. Mohrschladt'588 and Mohrschladt'207 do not disclose such a BET surface area, but rather teach that the BET surface area is preferably more than 40 m²/g, and particularly more than 100 m²/g. (Mohrschladt'588, column 6, line 67, to column 7, line 2; Mohrschladt'207, column 5, lines 12-13). Examples of BET surface areas in these references have BET surface areas of 46, 50, 73 and 116 m²/g. Therefore, neither Mohrschladt'588 nor Mohrschladt'207 anticipates the present invention.

It was an object of the present invention to provide a process for preparing polyamides in the presence of a titanium dioxide catalyst without reduction of catalyst activity. Despite the teaching in the cited art that if the BET surface area is smaller the bed volume must be higher to ensure sufficient catalyst activity (Mohrschladt'588, column 7, lines 2-4; Mohrschladt'207, column 5, lines 13-15), the present inventors have found, surprisingly, that such reduction of catalyst activity does not occur when using the titanium catalyst of the present invention (specification page 13, line 43, to page 14, line 2). Furthermore, the process of the present invention produces polymer with a lower titanium content than that of the cited art (see specification Table 1) which translates to less loss of catalyst and longer catalyst operating time (specification page 1, lines 38-41). In view of the aforementioned negative teaching in the prior art and unexpected results of the present invention, the present invention also would not have been obvious in view of Mohrschladt'588 and Mohrschladt'207.